

IN THE CLAIMS:

Please amend claims 1, 10, 19 and 21 and add claims 28-30 as follows.

1. (Currently Amended) A method of operating a differentiated service network having a plurality of routers, said method comprising:

determining an operating condition at a first router; and

propagating an indication of said operating condition at said first router to a second router; and

adjusting at least one parameter of constraint of incoming traffic flow based on said indication,

wherein said adjusting comprises performing parameter mapping and resource usage calculation.

2. (Original) The method of claim 1, wherein said first router comprises a core router and said second router comprises an edge router.

3. (Original) The method of claim 1, further comprising:

determining an operating condition at a third router; and

propagating an indication of said operating condition at said third router to said second router.

4. (Original) The method of claim 1, wherein said operating condition comprises a status of stability.
5. (Original) The method of claim 1, wherein said indication comprises a signal corresponding to a network traffic status.
6. (Original) The method of claim 5, wherein said network traffic status is represented by a color.
7. (Original) The method of claim 1, further comprising said second router making a profile change recommendation to a network operator.
8. (Original) The method of claim 1, further comprising said second router renegotiating a constraint of said network.
9. (Original) The method of claim 8, wherein said renegotiating comprises selecting from a plurality of constraints.
10. (Currently Amended) A method of operating a differentiated service network having a plurality of routers, said method comprising:

receiving, at a second router, an indication of an operating condition at a first router; and

adjusting at least one parameter of a constraint of incoming traffic flow based on said indication of said operating condition,

wherein said adjusting comprises performing parameter mapping and resource usage calculation.

11. (Original) The method of claim 10 further comprising:

determining said operating condition at said first router; and
propagating said indication of the operating condition at said first router to a second router.

12. (Original) The method of claim 11, wherein said first router comprises a core router and said second router comprises an edge router.

13. (Original) The method of claim 12, further comprising:

determining an operating condition at a third router; and
propagating an indication of said operating condition at said third router to said second router.

14. (Original) The method of claim 10, wherein said operating condition comprises a status of stability.

15. (Original) The method of claim 10, wherein said indication comprises a signal corresponding to a network traffic status.

16. (Original) The method of claim 15, wherein said network traffic status is represented by a color.

17. (Original) The method of claim 10, wherein said adjusting comprises said second router renegotiating a constraint of said network.

18. (Original) The method of claim 17, wherein said renegotiating comprises selecting from a plurality of constraints.

19. (Currently Amended) A differentiated service network comprising:

a first router;

a second router coupled to said first router, said first router being associated with a first entity to determine an operating condition at the first router, wherein said first entity associated with said first router propagates an indication of said operating condition at said first router device to a second router; and

means adjusting at least one parameter of constraint of incoming traffic flow based on said indication,

wherein said adjusting means comprises means for performing parameter mapping and resource usage calculation.

20. (Canceled)

21. (Currently Amended) The differentiated service network of claim ~~19~~ 20, wherein said second router is associated with a second entity that determines an operating condition at said second router.

22. (Original) The differentiated service network of claim 21, wherein said second entity renegotiates a constraint of said network.

23. (Original) The differentiated service network of claim 22, wherein renegotiating comprises selecting from a plurality of constraints.

24. (Previously Amended) The differentiated service network of claim 19, wherein said operating condition comprises a status of stability.

25. (Original) The differentiated service network of claim 24, wherein said indication comprises a signal corresponding to a network traffic status.

26. (Original) The differentiated service network of claim 19, wherein said first entity comprises a QoS Firewall entity.

27. (Original) The differentiated service network of claim 19, wherein said first router comprises a core router and said second router comprises an edge router.

28. (New) An apparatus for operating a differentiated service network having a plurality of routers, said apparatus comprising:

determining means for determining an operating condition at a first router; and

propagating means for propagating an indication of said operating condition at said first router to a second router; and

adjusting means for adjusting at least one parameter of constraint of incoming traffic flow based on said indication,

wherein said adjusting comprises performing parameter mapping and resource usage calculation.

29. (New) A second router comprising:

receiving means for receiving, at the second router, an indication of an operating condition at a first router; and

adjusting means for adjusting at least one parameter of a constraint of incoming traffic flow based on said indication of said operating condition,

wherein said adjusting comprises performing parameter mapping and resource usage calculation.

30. (New) A first router, comprising:

coupling means for coupling the first router to a second router, said first router being associated with a first entity to determine an operating condition at the first router, wherein said first entity associated with said first router propagates an indication of said operating condition at said first router device to the second router,

wherein the second router includes means adjusting at least one parameter of constraint of incoming traffic flow based on said indication, said adjusting means comprises means for performing parameter mapping and resource usage calculation.